

Science and Pseudoscience

John Dougherty

SoSe 2024

Meeting:	Fridays, 14:00–16:00 (s.t.) Ludwigstr. 31, Room 021
Office Hours:	Thursdays, 14:00–16:00 (c.t.) Ludwigstr. 31, Room 126
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Overview

Description What is science, and what distinguishes it from other activities? Can we distinguish science from other activities by its method? Does science even have a method? In this course, we will discuss attempts to answer these questions from Popper, Kuhn, Feyerabend, Lakatos, and others, as well as how these issues arise in current philosophy of science.

Objectives By the end of the course, you should be able to (i) formulate one or more philosophical problems concerning pseudoscience and (ii) assess one or more strategies for solving these problems. Exhibiting ability (i) means giving a statement, in academic writing, of a question—or inconsistency, paradox, puzzle, or similar—along with an explanation of why it poses a problem for some particular philosophical view. Exhibiting ability (ii) means describing, again in academic writing, a new or existing attempt to answer this question and explaining why this is or is not a plausible answer.

Assessment

The evaluation for this course will be by means of a term paper submitted at the end of the semester. If you would like to submit a term paper, you must register through LSF during the registration period (24.06–05.07) and submit it to me by email by the term paper deadline (TBA). Please note that extensions of this deadline are not up to me; if you need an extension, please contact Fabian Widerna (f.Widerna@lmu.de) at the Prüfungsamt für Geistes- und Sozialwissenschaften (PAGS).

Your paper should be on a topic related to philosophical issues concerning pseudoscience. Near the end of the semester I will distribute a list of suggested questions and grading criteria. You may write your paper on topic not on that list; if you do, then I recommend speaking to me before writing the paper, so that I can advise on the topic and scope of your planned alternative. The term paper should be 3000 words for BA students and 6000 words for MA students. In either case, it should be written in 12pt font, with 1.5 spacing, 3cm margins on the left and right, and a standard academic typeface (e.g., Computer Modern, Times New Roman, Palatino, Calibri, etc.)

Resources

Questions about the administration of philosophy teaching at LMU should be directed to Thomas Wyrwich (thomas.wyrwich@lrz.uni-muenchen.de). The Erasmus coordinator for philosophy at LMU is Peter Adamson (office.peter.adamson@lrz.uni-muenchen.de). The list of women's representatives (Frauenbeauftragte) for the Philosophy Faculty can be found on the Faculty's webpage (<https://www.philosophie.uni-muenchen.de/fakultaet/frauenbeauftragte/index.html>); the representative for the MCMP is Vanessa Carr. Issues regarding the economic, social, and cultural aspects of student life—including studying with a child or studying with a disability—are the responsibility of the Munich Student Union (<https://www.studentenwerk-muenchen.de>).

Schedule and readings

19.4 Introduction

- No reading

26.4 Falsificationism

- Popper, “A survey of some fundamental problems” from *The Logic of Scientific Discovery*

3.5 Scientific Revolutions

- Kuhn, “Logic of discovery or psychology of research?”

10.5 Scientific Research Programmes

- Lakatos, “Falsification and the Methodology of Scientific Research Programmes”

17.5 Epistemological Anarchy

- Feyerabend, excerpts from *Against Method*

24.5 The end of demarcation?

- Laudan, “The demise of the demarcation criterion”

31.5 Pragmatism

- Haack, excerpt from *Defending Science Reasonably*

7.6 Philosophy of pseudoscience

- Derksen, “The seven sins of pseudo-science”

14.6 Social epistemology of dissent

- Longino, excerpts from *The Fate of Knowledge*

21.6 Agnotology

- Oreskes and Conway, excerpts from *Merchants of Doubt*

28.6 Expertise

- Collins and Evans, excerpts from *Rethinking Expertise*

5.7 Replication

- Feest, “Why replication is overrated”

12.7* CANCELLED

19.7 Science and values

- Holman and Wilholt, “The new demarcation problem”